REMARKS/ARGUMENTS

Claims 1-9 are currently pending in this application. Claims 1-3 were selected for prosecution in response to an election of species requirement. Claims 8-9 were newly added, in Amendment A.

In the previous Office Action, claims 1 and 2 were rejected as being anticipated by Kato. Claim 3 was rejected as being obvious over Kato and Ide. Applicant traversed the rejection without substantively amending the claims.

Now, claims 1 and 2 (and 8 and 9) are rejected as being obvious over Kato in view of newly-cited Muramatsu. Claim 3 is rejected over Kato and Muramatsu, further combined with Ide.

Claim 2 has been cancelled, and Applicant has amended claim 1 to incorporate the features previously in claim 2 plus additional features. Claim 3 has been amended to depend from claim 1. It is respectfully submitted that the rejections are improper as applied to the amended claims.

Claim Amendments

The newly recited feature is claim 1 makes it possible to control the negative pressure in the working air chamber by always introducing negative pressure available from an air intake port of an internal combustion engine to the orifice control member. A basis for this amendment can be found in the specification at paragraphs [0015] and [0016], for example. Claim 2 has been cancelled, and the dependencies in other claims have been appropriately adjusted.

Refutation of Rejections

As just discussed, in accordance with the configuration of the presently-recited subject matter, negative pressure available from an air intake port of an internal combustion engine is available to be utilized as negative pressure to statically control a so-called semi-active type working air chamber. Therefore, <u>by directly and continuously applying this negative pressure to the working air chamber</u>, the vibration damping characteristics of a so-called semi-active type

engine mount can be suitably controlled, while effectively utilizing fluctuation in the negative pressure variation in the air intake port of the engine generated in the engine idling condition and the non-idling condition.

This arrangement makes it possible to realize a semi-active type engine mount with a simple structure, where no switch valve is used. This should be noted as a considerable industrial advantage or effect. Note that "semi-active type engine mount" should be interpreted to mean a fluid-filled engine mount that exhibits damping effects based on fluid pressure fluctuation or fluid flow action generated passively in the fluid chamber of the device, and that is capable of statically changing its vibration damping characteristics depending on a vibration to be damped. The semi-active type fluid-filled engine mount is distinguished from a so-called full active type vibration damping device, wherein a fluid pressure fluctuation in the pressure receiving chamber is dynamically controlled on the basis of frequency and amplitude of target vibration to be damped, by actively causing or changing pressure fluctuation in the pressure receiving chamber based on the target vibration by applying dynamic air pressure change to the working air chamber. That is, the semi-active type fluid-filled engine mount is different from a conventional passive type fluid-filled engine mount in terms of its ability to shift its passive damping characteristics, and is different from a full active-type fluid-filled engine mount in terms of its inability to exhibit active damping effect.

Regarding the primary reference to Kato, this shows a premised conventional technology only, i.e., it shows a semi-active type fluid-filled damping device. Kato does not disclose a technique that eliminates a switch valve in the semi-active type damping device. Namely, the switch valve 110 is needed in the Kato device to control negative pressure in the working fluid chamber. In other words, Kato fails to disclose or suggest directly utilizing negative pressure available from the air intake port of the engine in order to control its damping characteristics statically.

Muramatsu discloses a full active type vibration damping device, in which it is essential that the working air chamber 66 is connected to the vacuum source 8 and the atmosphere via a switch valve 81 to introduce dynamic air pressure fluctuation in the working air chamber. Muramatsu does not disclose or suggest directly applying to the working air chamber 66 negative pressure available from the air intake port of the engine. In the Muramatsu device, the switch

valve 81 cannot be eliminated.

The examiner contends that Muramatsu discloses a vibration damping device comprising a negative pressure conduit 71 adapted to always introduce negative pressure available from an air intake port of an internal combustion engine to the orifice control chamber. However, as described in column 5, lines 31-60 of Muramatsu, the disclosed structure has been developed on the following structural premises:

(a) The engine should be a direct-injection type, which is rare and switches between a "stoichiometric" operation and a "direct-injection" operation.

(b) Air intake side negative pressure greatly changes between the stoichiometric and the direct-injection operations.

(c) The intake side negative pressure is applied to a volume regulating air chamber 51 in order to change volume of the working air chamber 66.

As should be apparent, then, the Muramatsu device needs, in addition to the working air chamber connected to the vacuum source and the atmosphere via the switch valve 81, the volume regulating air chamber 51 as essential components. Namely, Muramatsu just discloses a technique to directly apply the intake side negative pressure to the volume regulating air chamber 51. Significantly, Muramatsu fails to disclose a technique to directly apply the intake side negative pressure to the working air chamber 66 with the switch valve 81 eliminated.

In addition, Muramatsu relates to a technique where it is premised that a very rare engine of direct-injection type is used, and utilizes very special phenomenon, i.e., an intake side negative pressure difference between "stoichiometric" operation and "direct-injection" operation. "Stoichiometric" operation is an engine operation where the combustion is performed by using the fuel-air mixture, and "direct-injection" operation is an engine operation where the combustion is performed such that a fuel is directly injected into a combustion chamber at a later stage of an air compression stroke (see column 5, lines 36-40). This type of engine has been developed recently.

Consequently, Muramatsu et al. fail to teach the following features recited in claim 1:

(A) To eliminate the switch valve and directly and continuously apply the negative pressure in the air intake port to the working air chamber;

(B) To utilize the intake-side negative pressure difference between the engine idling condition and the non-idling condition generated in a general-type internal combustion engine; and

(C) To utilize the intake-side negative pressure difference in order to control the pressure in the working air chamber that is statically controlled in the semi-active type engine mount.

In addition, it is impossible to incorporate the technique disclosed in Muramatsu et al. into the device shown in Kato, where the pressure in the working air chamber is statically controlled. In particular, the device disclosed by Muramatsu relates to a full active type damping device, and operates with the premise that the pressure in the working air chamber is dynamically controlled depending on the input vibration, where the intake side negative pressure is utilized only to control the volume of the working air chamber.

For at least these reasons, then, it is respectfully submitted that the subject matter recited in claim 1, and the claims depending therefrom, is neither anticipated by Kato or Muramatsu nor would have been obvious over these references taken in combination. Dependent claim 3 depends directly from amended claim 1 and, therefore, is allowable over Kato in view of Muramatsu and further in view of Ide.

In addition, claim 1 is generic to the presently-withdrawn claims and, thus, these presently-withdrawn claims are also allowable.

CONCLUSION

In view of the foregoing, applicants believe that the rejection to the independent claim, as amended, is improper. Thus, the independent and dependent claims now pending in this application are in condition for allowance.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at the number provided below.

Respectfully submitted,
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